

What is claimed is:

1. A surface mount device light emitting diode package, comprising:

a circuit board housing attached to a printed circuit board;

5 a first light emitting diode and a second light emitting diode supported by said circuit board housing, wherein said first light emitting diode and said second light emitting diode are coupled to said printed circuit board.

2. A surface mount device light emitting diode package as recited in claim 1,

10 wherein the each of the first and second light emitting diodes is coupled to the printed circuit board through a cathode and an anode.

15 3. A surface mount device light emitting diode package as recited in claim 2, wherein the cathodes and the anodes are patterned into the circuit board housing.

4. A surface mount device light emitting diode package as recited in claim 3, wherein the circuit board housing is soldered to the printed circuit board.

20 5. A surface mount device light emitting diode package as recited in claim 4, wherein each of the first and second light emitting diodes includes a LED die enclosed by an epoxy layer.

25 6. A surface mount device light emitting diode package as recited in claim 4, wherein the circuit board housing includes a reinforcing pin.

7. A surface mount device light emitting diode package, comprising:
a circuit board housing attached to a printed circuit board;
a first light emitting diode, a second light emitting diode, and a third light emitting
diode supported by said circuit board housing, wherein said first light emitting diode, said
5 second light emitting diode, and said third light emitting diode are coupled to said printed
circuit board.

8. A surface mount device light emitting diode package as recited in claim 7,
wherein each of the first light emitting diode, the second light emitting diode, and the third
10 light emitting diode is coupled to the printed circuit board through a cathode and an anode.

9. A surface mount device light emitting diode package as recited in claim 8,
wherein the cathodes and the anodes are patterned into the circuit board housing.

15 10. A surface mount device light emitting diode package as recited in claim 9,
further comprising a fourth light emitting diode, wherein said fourth light emitting diode is
coupled to the printed circuit board.

20 11. A surface mount device light emitting diode package as recited in claim 10,
wherein the fourth light emitting diode is coupled to the printed circuit board through a
cathode and an anode, which are patterned into the circuit board housing.

25 12. A surface mount device light emitting diode package as recited in claim 11,
wherein the first light emitting diode, second light emitting diode, third light emitting diode,
and fourth light emitting diode form a two by two matrix.

13. A method for providing a light emitting diode package, comprising:
providing a circuit board layout, wherein said circuit board layout is predefined;
patterning a light emitting diode wafer using said circuit board layout; and
dicing said light emitting diode wafer to form said light emitting diode package,
5 wherein said light emitting diode package includes a first light emitting diode and a second
light emitting diode.

14. The method as recited in claim 13, wherein the circuit board layout includes a
pattern to couple the first light emitting diode and the second light emitting diode to a printed
10 circuit board.

15. The method as recited in claim 14, further comprising soldering the light
emitting diode package to a printed circuit board.

15 16. The method as recited in claim 15, wherein the light emitting diode package
includes a third light emitting diode.

20 17. The method as recited in claim 16, wherein the circuit board layout includes a
pattern to couple the third light emitting diode to a printed circuit board.

18. The method as recited in claim 17, wherein the light emitting diode package
includes a fourth light emitting diode.

25 19. The method as recited in claim 18, wherein the circuit board layout includes a
pattern to couple the fourth light emitting diode to a printed circuit board.

20. The method as recited in claim 19, wherein the light emitting diode package forms a two by two array.

add
a